# ABHAY VENKATESH

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#### **OVERVIEW**

- Abhay Venkatesh is a *Tech Lead* at Anduril Industries, where he focuses on Autonomy Infrastructure, Simulation Infrastructure, Command-And-Control, and Lattice
- Abhay is mentored by **Jared Newman**, *Head of Platform* at Anduril, and **Nabil Enayet**, *Group Lead for Platform* at Anduril
- Prior to his Tech Lead role, Abhay worked directly under Brian Schimpf, CEO and Co-Founder
  of Anduril, and ex-Director of Engineering at Palantir, on Perception problems ranging from
  Edge Inference, Quantized Learning and Inference, to Object Detection and Mapping
- Abhay graduated from the University of Wisconsin-Madison with Distinction and Departmental Honors with a Bachelor of Science in Computer Sciences and Mathematics
- At the University of Wisconsin-Madison as an *Undergraduate Research Assistant*, Abhay worked on Computer Science research, focusing on Machine Learning, Computer Vision, Robotics, Human-Computer Interaction, Internet of Things, and Big Data Systems
- For his Machine Learning and Computer Vision Research, Abhay was advised by **Dr. Vikas** Singh, *Professor of Computer Science and Bioinformatics* at the University of Wisconsin-Madison
- For his Big Data Systems Research, Abhay was advised by **Dr. Shivaram Venkataram**, Assistant Professor of Computer Science at the University of Wisconsin-Madison
- For his Human-Computer Interaction and Robotics Research, Abhay was advised by **Dr. Bilge Mutlu**, Associate Professor of Computer Science at the University of Wisconsin-Madison
- Abhay has also worked at Facebook as a *Software Engineer Intern* on the News Feed Integrity Team, where he worked on machine learning, modeling, and product to improve the quality of the Facebook News Feed
- At Stanford University, Abhay was a Research Intern working on Robotics, Human-Computer Interaction, and Software Platform research advised by Dr. Wendy Ju, and Dr. Michael Bernstein
- In High School, Abhay was the *Valedictorian* for his breadth of excellence ranging from music and competitive quizzing to academics and entrepreneurship

## EDUCATION

Stanford University

Computer Science (Non-Degree)

University of Southern California

B.S. Computer Science

University of Wisconsin-Madison

B.S. Mathematics, Computer Sciences (Honors)

Stanford, CA

Summer Session (GPA 4.0)

Los Angeles, CA

Admitted but did not enroll

Madison, WI

Graduated with Distinction

## PUBLICATIONS

Generating Accurate Pseudo-Labels in Semi-Supervised Learning and Avoiding Overconfident Predictions via Hermite Polynomial Activations, CVPR 2020

Generating Accurate Pseudo-labels via Hermite Polynomials for SSL Confidently, Best Student Paper at MMLS 2019

Nondecomposable Data Dependent Regularizers offer Significant Performance Gains, DeepMath 2019

Optimizing Nondecomposable Data Dependent Regularizers via Lagrangian Reparameterization offers Significant Performance and Efficiency Gains, AAAI 2019, Ranking method on the Microsoft COCO Leaderboard

The Case for Unifying Data-loading in Machine Learning Clusters, HotCloud 2019, In Collaboration with Microsoft Research

Learning View Invariant Semantic Segmentation for UAV Video Sequences, SDM 2018, In Collaboration with American Family Insurance

Test	SCORES

GRE Composite 99th Percentile

GRE Analytical Writing 99th Percentile

GRE Verbal Reasoning 98th Percentile

SAT Math 97th Percentile

### HIGHLIGHTED COURSEWORK

Stanford CS 161 Design and Analysis of Algorithms

UW-Madison CS 564 Database Management Systems

UW-Madison CS 838 Graduate Learning Methods in Computer Vision

UW-Madison CS 766 Graduate Computer Vision

UW-Madison CS 760 Graduate Machine Learning

UW-Madison CS 744 Big Data Systems

UW-Madison CS 540 Artificial Intelligence

UW-Madison CS 537 Operating Systems

UW-Madison Math 531 Advanced Probability Theory

UW-Madison Math 525 Linear Programming

UW-Madison Math 521 Analysis I

UW-Madison Math 522 Analysis II

## Awards

Edison Award	USA
Awarded to Anduril for the Ghost Product which Abhay contributed to	2021
Cornell, Maryland, and Max Planck Pre-Doctoral Research Fellowship Internationally recognized award, fully-funded seminar at the Max-Planck Institut	e Germany $2018$
Hilldale Undergraduate Research Fellowship Research award and funding	Madison, WI 2018
Phi Kappa Phi Nominee Top 7.5% of all juniors	Madison, WI 2018
Course Citation CS 564: Database Management Systems	Madison, WI 2018
The Hub CS Club Coding Competition 1st place	Madison, WI March, 2017
Dean's Award of Excellence Awarded to Madison Enactus of which Abhay was the VP of Technology	Madison, WI 2016
Best Social Entrepreneurship Project, Transcend  Awarded to Madison Enactus of which Abhay was the VP of Technology	Madison, WI 2016
John W. Jung Memorial Scholarship  Awarded by UW-Madison for leadership, excellence, and service.	Madison, WI 2016
Dean's List University of Wisconsin-Madison	Madison, WI 2016
High School Valedictorian  To the best overall student	December, 2015
National 3rd Place in Top Tech Quiz  Prestigious national award out of 15,000 participants across the country	December, 2014
Acknowledgement by Head of State For Founding a Successful Not-For-Profit	December, 2014
State Recommendation For Founding a Successful Not-For-Profit	December, 2014
EADERSHIP	

Judge DubHacks Judge HackThis by HackIllinois Judge GarudaHacks	October, 2020 August, 2020 August, 2020
President, Co-Founder AI at UW, ai.cs.wisc.edu VP of Technology Madison Enactus Executive The Hub CS Club Chief Technology Officer Insight Wisconsin Executive Transcend	2017 2016 2016 2016 2015
Co-Founder Model United Nations Co-Founder Soccer Cup Co-Founder Student Parliament Quizmaster Top Engineering University Organizations	2014 2014 2013 2013

Contrary Talent Member (~100 selected out of 2200+)

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